IN THE CLAIMS:

Listing of Claims:

1   **1.** (original) A direction-finding method comprising the steps of:

2   establishing a cross-over position point;

3   relocating a receiver to a new receiver spacial location;

4   said receiver at said new receiver position receiving a transmission from a

5   transmitter at a transmitter position;

6   determining a real-time line of bearing from said receiver to said transmitter;

7   generating a connecting vector from said real-time line of bearing to said cross-

8   over position point; and

9   identifying a real-time position of said transmitter along said connecting vector.

1   **2.** (original) The method of Claim 1, wherein said identifying comprises identifying a

2   best guess transmitter position responsive to said real-time position of said transmitter.

1   **3.** (original) The method of Claim 2, further comprising the steps of:

2   again relocating said receiver to a new receiver spacial location;

3   said receiver at said new receiver position receiving a transmission from said

4   transmitter at a transmitter position;

5   determining another said real-time line of bearing from said receiver to said

6   transmitter;

7   generating a said connecting vector from said last real-time line of bearing to said

8   best guess transmitter position; and

9   identifying said best guess position of said transmitter along said connecting

10   vector.

1   4. (original) The method of Claim 3, wherein:

2   said determining step further comprises determining a quality factor for said real-
3   time line of bearing; and

4   said identifying step further comprises assigning a probability factor to said real-
5   time position of said transmitter responsive to said quality factor.

1   5. (original) The method of Claim 3, further comprising a repeating step to repeat said
2   relocating, receiving, determining, generating and identifying steps until said probability
3   factor exceeds a predetermined threshold value.

1   6. (original) The method of Claim 3, further comprising a repeating step to repeat said
2   relocating, receiving, determining, generating and identifying steps until a user terminates
3   said direction finding method.

1   7. (original) The method of Claim 3, further comprising a repeating step to repeat said
2   relocating, receiving, determining, generating and identifying steps until said probability
3   factor meets a user-defined threshold value.

1   8. (previously presented) A direction-finding method executed by a portable DF set
2   comprising a receiver and a programmable computing system comprising a processor, an
3   input device, an output device and a storage medium, the method comprising the steps of:

4   establishing a cross-over position point representing a position of a transmitter
5   and outputting said point at said output device;

6   moving said DF set to a new DF set position;

7   receiving at said DF set in said new DF set position, a transmission from said
8   transmitter;

9   determining, via said programmable computer, a real-time line of bearing from
10 said DF set to said transmitter responsive to said transmission;

11   generating, via said programmable computer, a connecting vector from said real-
12 time line of bearing to said cross-over position point; and

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13 determining a real-time transmitter position along said connecting vector and
14 outputting said position at said output device.

1 **9.** (original) The method of Claim 8, wherein said identifying comprises identifying a
2 best guess transmitter position responsive to said real-time position of said transmitter.

1 **10.** (original) The method of Claim 9, further comprising the steps of:

2 again relocating said receiver to a new receiver spacial location;

3 said receiver at said new receiver position receiving a transmission from said
4 transmitter at a transmitter position;

5 determining another said real-time line of bearing from said receiver to said
6 transmitter;

7 generating a said connecting vector from said last real-time line of bearing to said
8 best guess transmitter position; and

9 identifying said best guess position of said transmitter along said connecting
10 vector.

1 **11.** (original) The method of Claim 10, wherein:

2 said determining step further comprises determining a quality factor for said real-
3 time line of bearing; and

4 said identifying step further comprises assigning a probability factor to said real-
5 time position of said transmitter responsive to said quality factor.

1 **12.** (original) The method of Claim 10, further comprising a repeating step to repeat said
2 relocating, receiving, determining, generating and identifying steps until said probability
3 factor exceeds a predetermined threshold value.

1 **13.** (original) The method of Claim 10, further comprising a repeating step to repeat said
2 relocating, receiving, determining, generating and identifying steps until a user terminates
3 said direction finding method.

1 **14. (original)** The method of Claim 10, further comprising a repeating step to repeat said
2 relocating, receiving, determining, generating and identifying steps until said probability
3 factor meets a user-defined threshold value.

1 **15. (previously presented)** A real-time direction-finding system, comprising:

2   a transmitter transmitting wireless transmissions, said transmitter defining a
3 spacial location;

4   a DF set comprising a movable receiver for receiving said transmissions; and

5   a computing device for determining said location of said transmitter responsive to
6 transmissions received by said movable receiver and not responsive to other said
7 receivers, wherein said computing device operatively:

8   generates a cross-over point, said cross-over point defined as the
9 intersection of a pair of sequential real-time lines of bearing from said DF set each line of
10. bearing corresponding to a wireless transmission from said transmitter received by said
11 DF set;

12   receives a transmission signal responsive to a transmission received by
13 said DF set after said DF set has been moved to a new spacial location;

14   determines a real-time line of bearing from said DF set to said transmitter
15 responsive to said transmission signal;

16   generates a connecting vector from said real-time line of bearing; and

17   determines a real-time transmitter position along said connecting vector
18 and outputting said position at an output device associated with said computing device.

1 **16. (canceled)**

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